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ABSTRACT

One of the many criticisms leveled at standardized testing is that the time limits commonly used require a speed component of performance which may act to the disadvantaged of certain culturally defined groups. Recent studies by the authors examined the question of differential time limits and group performance for standardized academic aptitude tests. Both studies deleted items from an experimental section in order to manipulate the speed with which an examinee was required to work. The present study sought to extend the range of culturally defined groups and presented an opportunity to use a more direct method of manipulating working speed. A 27 item reading comprehension section of a national academic aptitude test was administered under two conditions. Under one condition the section was administered with the usual 30 minute time limit and under the other condition the time limit was extended to 40 minutes. Data for the study were collected in October and December of 1971. The majority of subjects were in their senior year in college. The categories of group membership included black, white, Chicano, and Oriental; male or female. As in the first two studies, the results rejected the hypothesis that allowing more liberal time limits would be more beneficial to minority groups than to the majority group. (Author/JM)

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The Effects of Test Time Limits on Performance of Culturally Defined Groups

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One of the many criticisms leveled at standardized testing is that the time factor commonly used requires a speed component of performance which may not be the characteristic of certain culturally defined groups. Since the stated intent of a most standardized scholastic aptitude tests is to measure power without placing undue emphasis on speed, an important consideration for any test is the extent to which working speed is related to performance and whether manipulating the usual test time limits would result in differential levels of performance for different categories of examinees. Recent studies by Evans and Reilly (1972, 1973) examined the question of differential time limits and group performance for standardized academic aptitude tests. Both studies were limited, however, in the range of cultural groups included and the methodology employed. Because of the standardization required for nationally administered academic aptitude tests, both studies did not actually change the time limits but deleted items from an experimental section in order to manipulate the speed with which an examinee was required to work. Analyses were then carried out on a set of items that were common to different rate of work conditions. The present study sought to extend the range of culturally defined groups and, in addition, presented an opportunity to use a more direct method of manipulating working speed.

Methods

A 27 item reading comprehension section of a national academic aptitude test was administered under two conditions. Under condition A the section

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was administered with the usual 30 minute time limit and under conditions in the time trials was extended to 45 minutes. This 1/2 increase in time limit was felt to be sufficient to allow most examinees to finish responding to personal characteristics. The two conditions were randomly assigned to test center. Assignment of conditions to test center rather than subject was necessary because of the administration problems which different time limits within the same center would create.

Data for the study were collected in October and December of 1971 during regular national administrations. The majority of subjects were in their senior year in college. The remainder of group contained white men interviewed in response to two questions on the last page of the four booklet battery: Black male, Black female, white male, white female, Chicano, and Oriental (because of the equal proportion of females in these latter two groups, these two groups were combined and could not be dealt).

Two major analyses were performed to test the hypothesis that alternate time limits would have no differential effect on the performance of the different categories of examinees. The first analysis was a somewhat modified analysis of covariance with the six groups described above serving as levels of one factor and the two time conditions serving as levels of the other factor.

Since it was known that the experimental section would be highly correlated with the reading comprehension section in the standard part of the test, it was clear that under the proper experimental conditions the standard part of the test could serve as a covariate and reduce the experimental error. It was also clear that using a regular analysis of covariance was not appropriate because certain assumptions were not met, specifically non-random assignments to culturally defined groups.